P-3 Orion 04/05/18

Aircraft: P-3 Orion - WFF (See full schedule)
Flight Number: 2018 OIB Arctic -Science #4
Payload Configuration: 2018 OIB Arctic
Nav Data Collected: No
Total Flight Time: 8 hours
Submitted by: Janet Letchworth on 04/05/18
Flight Segments:

From:	BGTL	**To:**	BGTL
Start:	04/05/18 10:35 Z	**Finish:**	04/05/18 18:32 Z
Flight Time:	8 hours		
Log Number:	18P008	**PI:**	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		
Comments:	Today's mission flew the baseline priority ICESat-2 North mission.		

Flight Hour Summary:

	18P008
Flight Hours Approved in SOFRS	201.2
Total Used	190.4
Total Remaining	10.8

18P008 Flight Reports

Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown
03/13/18	2018 OIB Arctic - Airworthiness Test Flight	Other	0.8	0.8	200.4	
03/14/18	2018 OIB Arctic -Project Test Flight - Laser	Other	2.6	3.4	197.8	
03/15/18	2018 OIB Arctic -Project Test Flight - Radar	Other	5.7	9.1	192.1	
03/18/18	2018 OIB Arctic -delta ATF	Other	0.8	9.9	191.3	
03/20/18	2018 OIB Arctic -Transit to Thule	Transit	7.9	17.8	183.4	
03/22/18	2018 OIB Arctic - Science #1	Science	7.8	25.6	175.6	
04/03/18	2018 OIB Arctic - Science #2	Science	7.9	33.5	167.7	
04/04/18	2018 OIB Arctic - Science #3	Science	8.1	41.6	159.6	
04/05/18	2018 OIB Arctic - Science #4	Science	8	49.6	151.6	
04/06/18	2018 OIB Arctic - Science #5	Science	8.8	58.4	142.8	
04/07/18 - 04/08/18	2018 OIB Arctic - Science #6	Science	8.1	66.5	134.7	
04/08/18 - 04/09/18	2018 OIB Arctic - Science #7	Science	8.3	74.8	126.4	
04/14/18 - 04/15/18	2018 OIB Arctic - Science #8	Science	7.7	82.5	118.7	
04/16/18	2018 OIB Arctic - Science #9	Science	8.2	90.7	110.5	

04/18/18	2018 OIB Arctic - Science #10	Science	8	98.7	102.5
04/19/18	2018 OIB Arctic - Science #11	Science	7.7	106.4	94.8
04/20/18	2018 OIB Arctic -Transit to Kanger	Transit	4.2	110.6	90.6
04/21/18	2018 OIB Arctic - Science #12	Science	8.1	118.7	82.5
04/22/18	2018 OIB Arctic - Science #13	Science	6.5	125.2	76
04/23/18	2018 OIB Arctic - Science #14	Science	8.2	133.4	67.8
04/25/18	2018 OIB Arctic - Science #15	Science	7.7	141.1	60.1
04/26/18	2018 OIB Arctic - Science #16	Science	8.8	149.9	51.3
04/27/18	2018 OIB Arctic - Science #17	Science	8	157.9	43.3
04/29/18	2018 OIB Arctic - Science #18	Science	8.3	166.2	35
04/30/18	2018 OIB Arctic - Science #19	Science	9.3	175.5	25.7
05/01/18	2018 OIB Arctic - Science #20	Science	7.4	182.9	18.3
05/03/18	2018 OIB Arctic -Return Transit Leg #1	Transit	6.4	189.3	11.9
05/03/18	2018 OIB Arctic -Return Transit Leg #2	Transit	0.6	189.9	11.3
05/03/18	2018 OIB Arctic -Return Transit Leg #3	Transit	0.5	190.4	10.8

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

Related Science Report:

OIB - P-3 Orion 04/05/18 Science Report

Mission: OIB

Mission Summary:

OIB completed the baseline priority ICESat-2 North mission. This mission was designed to overfly planned ICESat-2 ground tracks over a wide range of ice regimes near Thule. Some of the flightlines were centered on each of three beam pairs (left, nadir and right) in turn, sampling at least one of each beam pair during this mission. The east-west crossing line was designed to capture as many ascending/descending crossovers as possible. We also flew a particular flowline of Petermann Glacier which has been sampled intermittently during the ATM and OIB eras, overflying two GCNet sites in the process. The return leg to Thule was modified to overfly a segment of an Ultra-wideband radiometer (UWBRAD) flight line, at the request of Ken Jezek.

Weather was good for much of the mission with only a bit of haze on the southern portion of the flight line, though this did not significantly impact data collection. The DMS primary camera experienced a failure during the flight, the cause is still being investigated. The backup system successfully collected data during the flight with about 1-2 minutes of data lost. All other instruments performed nominally.

Data Volumes

ATM T6: 136 Gb
ATM T7: 160 Gb
CAMBOT: 92 Gb

FLIR: 15 Gb
KT19: 10 Mb
DMS: 103.5 Gb

Snow radar: 1.36 Tb
MCoRDS: 3.26 Tb
Accumulation radar: 510 Gb

Data on: 1101
Data off: 1830

File:
ICESat2North.pdf
Submitted by: Nathan T. Kurtz on 04/05/18

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